

could be charged up to the operation. The final group of cases brought together are those on whom the uterus was interposed between the bladder and the vaginal layers, including 10 cases. As would be expected the bladder base was thrown into a large horizontal fold, with deep sulci on one or both sides and also frequently above the fold. Trigonitis, with the frequent presence of dilated capillaries throughout the entire bladder mucosa, was the rule. The vesical symptoms of the patients of this group were as with the patients of the previous groups, remarkably negative. Seven patients were free from any vesical irritation or frequent urination; with one the loss of control before the operation was not relieved. This detailed review of the study of the end-results on these patients, from the view-point of the anatomical condition in which the base of the bladder is left, is surely not of a flattering character. That the abnormal character of the conditions found were permanent cannot be questioned, since they did not disappear under full distention of the bladder as would have occurred if they were merely due to incomplete filling of the bladder at the time of the examination. The query naturally presents itself that although apparently there is no disturbance as a result of this departure from the normal plane-like floor, does not such a state render more possible some future disturbance of a systemic character? The truth of such a possibility cannot, from the nature of the condition, be determined except by painstaking investigation of each individual patient over a long period of years, and this is hardly possible on account of the nomadic character of the average hospital patient.

## OPHTHALMOLOGY

UNDER THE CHARGE OF

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**Traumatic Variations in the Tension of the Eyeball.**—MAGITOT (*Ann. d'Oculist.*, January, 1918, 1) publishes a study of the tension of the globe as affected by traumatism, which may show itself either in hyper- or hypotension. He regards this as depending upon two principal causes: active and passive. The former depends upon mechanical interference of the venous circulation in the orbit, hence extra-ocular. This gives rise to hypertension and persists as long as the disturbance in the circulation continues. The latter is due to a traumatism acting upon the intra-ocular vasomotor nervous mechanism. Traumatism of too slight intensity to determine within the globe grave lesions of the membranes may, however, occasion remarkable alterations in the tension of the organ revealing itself as a disequilibrium which becomes sensible as greater or less to the tonometer. Usually the hyper- or hypo-

tension tends to recede and the globe to take up the tension of the healthy eye; but in some cases a veritable instability of tonus occurs which may show itself brusquely as considerable variations in the tonometric readings; finally, in other cases, the disturbance of equilibrium persists as hypo- or hypertension. These phenomena are analogous to the vascular instability which occurs in shock. They depend upon vasodilatation or vasoconstriction due to reflex action of the intra-ocular sympathetic center.

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**Tuberculin in Eye Diseases.**—VERHEYDEN (*British Jour. Ophthalm.*, April, 1918, 223) makes a plea for the more frequent use of tuberculin in strumous eye affections involving the conjunctiva, cornea, iris, ciliary body, sclera, choroid and tuberculous paralysis of the third nerve. A number of cases are detailed in which this treatment was highly satisfactory. Concomitant treatment consisting of 4 per cent. solution of dionin and subconjunctival injections of saline solution are useful adjuvants. He concludes that many eyes will be saved by tuberculin which would formerly have been lost or greatly damaged. Carefully tested and manipulated, risks of accidents from tuberculin are negligible; the results will be most gratifying in confirming a doubtful diagnosis and in ameliorating or altogether curing these serious and rebellious diseases.

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**Iritis and Cyclitis in Dysentery.**—MAXWELL and KIEP (*British Jour. Ophthalm.*, February, 1918, 71) observed 6 cases all from the Mediterranean area, the subjects of infection with *Bacillus dysenteriae* (Shiga), who developed iritis or cyclitis. They conclude that patients suffering from an infection by this bacillus may occasionally develop anterior uveitis as a result of this infection, as pointed out by Morax. The ocular infection may or may not be accompanied by articular manifestations. These affections would appear to occur most frequently about a month after the first signs of involvement of the bowel, but may occur as early as the twelfth day. The articulo-ocular syndrome corresponds exactly to that occurring in another infection of a mucous tract, viz., gonorrhea, as pointed out by Garrod.

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**Close versus Distant Illumination for Operations.**—MADDOX (*British Jour. Ophthalm.*, February, 1918, 84) has attached to conjunctival forceps for operations on after-cataract as well as for emergency night operations a tiny screened electric lamp to one limb of the forceps half an inch from the gripping end. This attachment can be made with adhesive strapping or, better still, by a very light metal clip or steel wire, into the curl of which an ordinary bulb from a child's flash lamp is so screwed as to illuminate the iris brilliantly, when the forceps are gripping the limbal conjunctiva. The connecting cord must be of a feather-weight character. The grip of the forceps ensures a perfectly steady light and maintains its distance from the cornea constant. It is for needling operations that the method is ideal, and it also greatly facilitates the removal of foreign bodies from the cornea. While distant lights have some advantages of their own, especially in large hospitals, some form of close illumination has certain advantages: these are greater economy, greater portability and greater kindness to the patient's eye. A close light is diffused widely over his retina, with no

possibility of the image of the filament being thrown thereon. It also increases the surgeon's visual acuity. The smallness of the patch of light on the patient's eye is less disturbing than a widespread reflection from the whole face and pillow.

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**Disinfection of Artificial Eyes.**—COULOMB (*Ann. d'Oculist.*, April, 1918, 202) observes that while the method of choice is boiling it is extremely slow. The eye must not only remain in boiling water long enough, but to avoid cracking it is placed in cold water, the temperature of which is cautiously raised. After sterilization the water must be allowed to cool slowly and gradually to the room temperature. Placing a cold artificial eye in boiling water will invariably crack it. The author has experimented with new eyes, both double and single shells, and with pieces of old ones; the pieces were rubbed upon a carpet or on the ground. Immersion in various antiseptic solutions (bichloride of mercury, formol, etc.), failed to sterilize, as proved by the development of numerous colonies of different microbes upon culture media. In view of these negative results further experiments were made which led to the discovery that Gram's fluid (iodin 1, iodide of potash 2, water 300) furnishes a satisfactory solution; after immersion from five to ten minutes no colony developed in any of the tubes; in fact, when the time of immersion was reduced to as short an interval as seven seconds no colony was found to have developed five days later. It was also found that if the solution be diluted one-half it was still sufficiently strong for practical purposes. Tincture of iodine alone has the disadvantage that it stains the fingers and is much more difficult to wash entirely from the artificial eye—an inconvenience which does not belong to Gram's fluid, which is readily removed by rinsing in cyanide of mercury, 1 to 5000, or simply sterilized water. The experiments further showed that a new eye is more easily disinfected than an old one and that the double shells are more quickly sterilized than the single pieces. The above method is simple and entirely efficacious.

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**Simple Method of Recognizing Feigned Diplopia.**—TERRIEN (*Arch. d'Ophtal.*, January-February, 1918, 45) recommends for the detection of simulated diplopia, placing successively a light blue glass immediately followed by an opaque one before the same eye, the subject under examination being in an ill-lighted room, and fixing a small flame. If he continues to complain of diplopia after the substitution of the opaque for the colored glass he is evidently simulating. Diplopia, as is well known, being frequently purely subjective of numerous simulated or exaggerated ocular affections, is one of the most difficult to recognize, particularly if it has actually existed for a time and the patient desires to prolong his period of disability. In slight cases the absence of limitation of movements of the globe and the integrity of the field of fixation render it impossible to exclude all possibility of diplopia and to assert positively simulation or exaggeration. Prisms, the diploscope or repeated examination with colored glasses may, from the discordances in the patient's assertions, determine the degree of sincerity; but frequently the data so obtained, even when there is no intention of simulation or exaggeration, in individuals not trained to observe, may leave the examiner in doubt. The advantages of a simple method like the above are obvious.